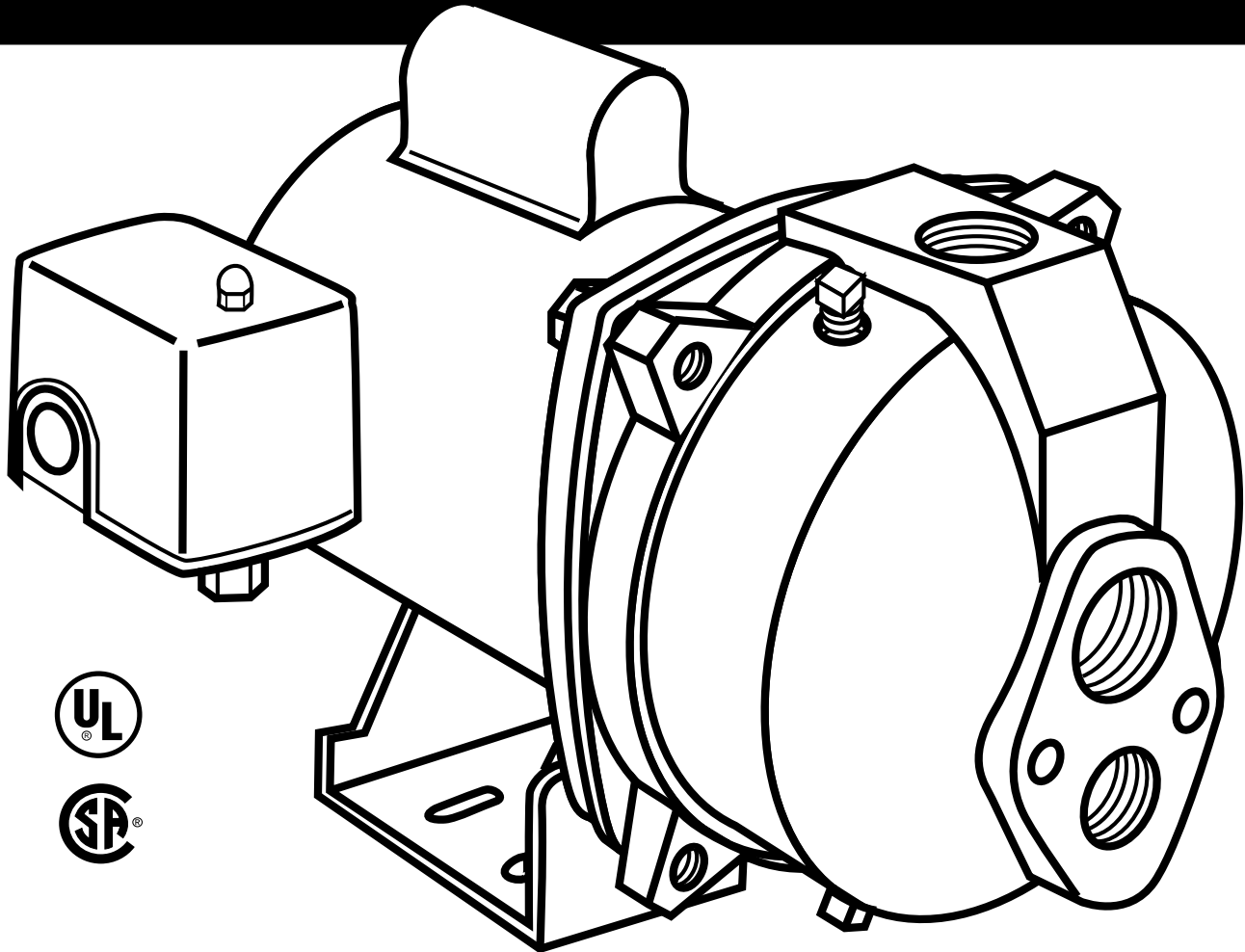


# JET PUMPS



**MODEL R30**  
**CONVERTIBLE**  
**1/3 HP**

**MODEL R50**  
**CONVERTIBLE**  
**1/2 HP**

**MODEL R100**  
**CONVERTIBLE**  
**1 HP**

**WARRANTY: PRODUCT DEFECTS COVERED 12 MONTHS FROM DATE OF PURCHASE OR 18 MONTHS FROM DATE OF MANUFACTURE, WHICHEVER COMES FIRST. RECEIPT AND PRODUCT DATE CODE REQUIRED FOR WARRANTY CLAIM.**

**WATER ACE PUMP COMPANY • KITCHENER, ONTARIO N2G 4W5**

# IMPORTANT INSTRUCTIONS BEFORE INSTALLATION

Failure to follow these instructions may cause serious bodily injury and/or property damage.



**WARNING** Warranty void if product modified, drilled, painted, or altered in any way; if used to pump hot water, or to pump liquids other than water (such as but not limited to chemicals, fertilizers, flammable liquids, herbicides, mud, tar, cement, wood chips); or otherwise abused.

1. Before installing or servicing your pump, BE CERTAIN pump power source is disconnected.
2. All installation and electrical wiring must adhere to state and local codes and must be complete before priming the pump. Check with appropriate community agencies, or contact your local electrical and pump professionals.
3. Pump should be installed in a dry, convenient location which is close to the well and provides ample space for installation and servicing the well. A dry basement, pit, or utility room is an excellent choice when allowed by law.
4. **CALL AN ELECTRICIAN WHEN IN DOUBT.** Pump motor should be connected to a separate electrical circuit directly from main switch. There must be a fuse box or circuit breaker installed in this line. Plugging into existing outlets may cause low voltage at motor, resulting in blown fuses, tripping of motor overload, or burned out motor. **Refer to electrical diagrams on following page for electrical connections.**
5. It is mandatory that a permanent ground connection be made from the pump motor to the grounding bar at the service panel. Do not connect pump motor to a power supply until permanently grounded. For maximum safety, ground the pump motor to a circuit equipped with a fault interrupter device.
6. **Motor Grounding Instructions: WARNING**  
Reduced risk of electric shock during operation of this pump requires the provision of acceptable grounding. **Caution: Failure to ground this unit properly may result in severe electrical shock.** If the means of connection to the supply-connection box is other than grounded metal conduit, ground the pump motor back to the service by connecting a copper conductor, at least the size of the circuit conductors supplying the pump motor, to the grounding screw provided within the wiring compartment. NOTE: N.E.C. requires pumps be grounded at installation.

## CAUTION



Pump must be primed! Make sure pump is full of water before running! Failure to do so will cause damage to mechanical seal, leakage and flooding!



Never run pump against closed discharge valve! To do so can cause high temperatures, pump damage, personal injury and property damage!



**WARNING** Hazardous voltage! Can shock, burn or cause death. Read instructions before installing!



To avoid dangerous or fatal shock hazard turn off power and ground motor before connecting motor to electrical power supply!



Do not ground to a gas supply line!



Match supply voltage to nameplate voltage. Wrong voltage can cause fire or motor damage and voids warranty. If in doubt, consult a licensed electrician.



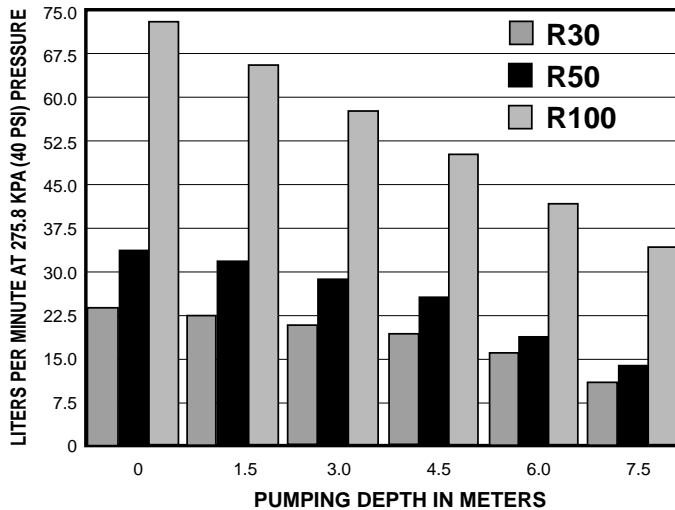
Pump may be **HOT** to touch. Use caution!

7. Voltage of power supply must match the voltage of the pump. The 1/3 HP and 1/2 HP pump motors are factory preset to 115V. The 1 HP pump motor is preset to 230V. Both types of motors may be wired for either 115V or 230V. If motor is converted to 115V, electrician should insure that electrical and power leads can handle the higher amps.
8. During installation, cover well to prevent foreign matter from contaminating the well or later damaging the pump during operation. Test well water for purity. Chlorination may be necessary. Check local Health Department for proper testing and recommendations.
9. Hand pump new wells until clear. Sand or other sediment will seriously damage the pump.
10. The following may cause severe damage to pump and/or piping and will void warranty:
  - Failure to protect pump and piping against below freezing temperatures.
  - Pumping chemicals or corrosive liquids.
  - Running the pump dry. Follow priming instructions on pages 5 or 8, depending on the installation.
  - Using extension cords.
  - Pumping gasoline or other flammable liquids.
  - Using this pump in or near a swimming pool.

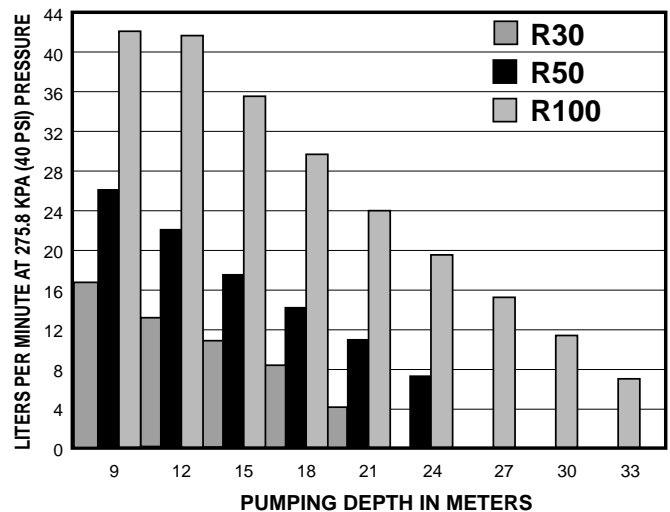
## FINDING THE DEPTH OF YOUR WELL

Tie a small but heavy weight to the end of a piece of string (be sure there is enough string; some wells are very deep). Lower the weight into the well until it reaches the bottom. Take up the slack and mark the string at ground level. Pull the weight out of the well and measure from the bottom of the weight to the ground level mark. This is the depth of your well. Subtract five feet from the depth of your well. This number should not exceed the maximum rated depth for your pump. If it does, it will greatly hinder or prevent the proper operation of the pump.

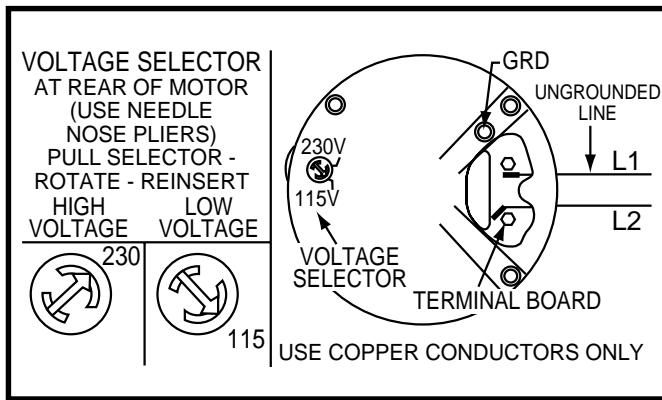
### SHALLOW WELL PUMP CAPACITIES



### DEEP WELL PUMP CAPACITIES

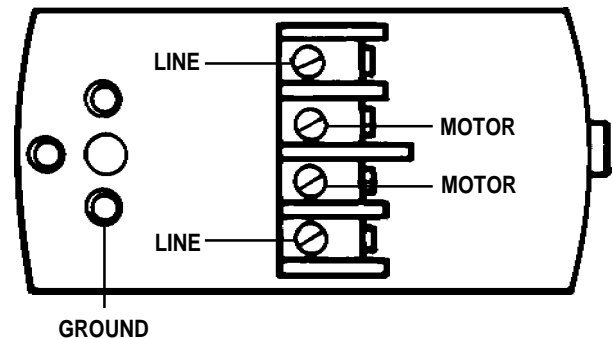


## IMPORTANT SELECT CORRECT VOLTAGE



### WIRING YOUR PUMP

Remove the cover from the pressure switch. Connect the bare copper ground to the ground screw in the pressure switch. Connect the power supply to the terminals marked "Line" in the diagram below.



### WIRE SELECTION GUIDE

| PUMP MODEL | HORSE POWER | VOLTAGE | NAME PLATE AMPS | MAX. WIRE LENGTH IN METERS USING AWG SIZE |     |     |     |
|------------|-------------|---------|-----------------|---|-----|-----|-----|
|            |             |         |                 | #14                                       | #12 | #10 | #8  |
| R30        | 1/3         | 115     | 8.2             | 45  | 72  | 112 | 177 |
| R50        | 1/2         | 115     | 10.6            | 35  | 58  | 90  | 141 |
|            |             | 230     | 5.3             | 145                                       | 230 | 360 | 566 |
| R100       | 1           | 115     | 14.8            | 22  | 35  | 56  | 88  |
|            |             | 230     | 7.4             | 90  | 144 | 225 | 354 |

### FUSE AND CIRCUIT BREAKER SIZE GUIDE

| HORSE POWER | STANDARD LINE PLUG FUSE* |      | LOW PEAK - CART. TYPE FUSETRON - CART. TYPE FUSTAT - PLUG TYPE* |       | CIRCUIT BREAKER |      |
|-------------|--------------------------|------|---|-------|-----------------|------|
|             | 115V                     | 230V | 115V  | 230V  | 115V            | 230V |
| 1/3         | 20                       | 10   | 12  | 6-1/4 | 20              | 15   |
| 1/2         | 20                       | 10   | 12  | 6-1/4 | 20              | 15   |
| 1           | 30                       | 15   | 20  | 10    | 30              | 15   |

\*For circuits not over 150 volts to ground.

### PIPING

Plastic PVC pipe is shown in the illustrations, but galvanized steel pipe may be used if desired. All piping must be clean and free of all foreign matter to prevent clogging. **ALL JOINTS AND CONNECTIONS IN THE WELL ASSEMBLY MUST BE AIRTIGHT.** Even a pin-hole leak will prevent the proper operation of the pump (this is the most common problem). Use thread compound on all threaded joints unless specified otherwise.

### DRAINING FOR SERVICING OR FOR WINTER

The pump should be drained before it is disconnected for servicing or if it is in danger of freezing. To drain:

- Remove drain plug from bottom of pump case.
- Remove discharge tee to vent the pump.
- Drain all piping to a point 3 feet (1 meter) below ground level.

# SHALLOW WELL PUMP INSTALLATION (4" DIAMETER CASED WELL)

For wells 25 feet (7.5 meters) or less in depth, all materials with part numbers are quality Water Ace parts.

## General Materials

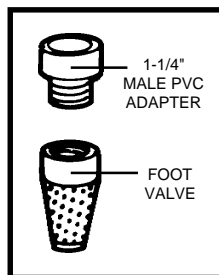
- One can PVC cement (read instructions carefully)
- One can thread compound (read instructions carefully)
- Two male 1-1/4" PVC adapters
- Enough rigid 1-1/4" PVC pipe and couplings to reach from bottom of well to pump.
- One 4" well seal #RWS4-12 with vent plug
- One 1-1/4" PVC elbow
- One discharge tee #RDT
- One male 1" PVC adapter
- Enough rigid 1" PVC pipe to reach from pump to pressure tank to service line.
- One female 1" PVC adapter
- One 1" tank cross #RTC 290-1 (for diaphragm tanks)
- Two 1/4" plugs
- One 1/2" boiler drain

## Tools Needed for all pump installations

Pipe wrench, pipe clamp, crescent wrench, slot screwdriver, 24-tooth hacksaw, knife or round file.

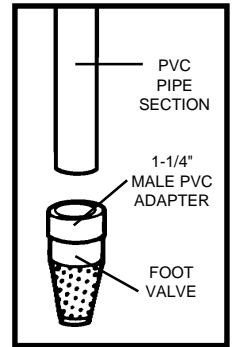
**REMINDER: ALL JOINTS AND CONNECTIONS MUST BE AIRTIGHT. A SINGLE PIN-HOLE LEAK WILL PREVENT THE PROPER OPERATION OF THE PUMP. USE THREAD COMPOUND ON ALL THREADED CONNECTIONS UNLESS SPECIFIED OTHERWISE.**

- STEP 1** Thread 1-1/4" male PVC adapter into foot valve. Hand tighten, then tighten 1/4 turn with crescent wrench.

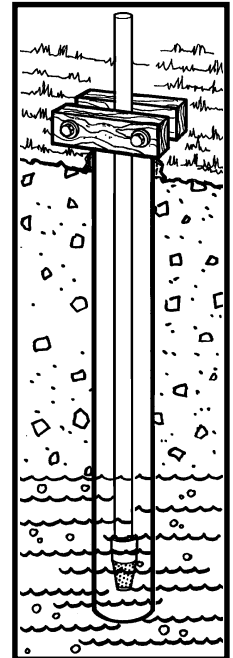


- STEP 2** Subtract five feet (1.5 meters) from the depth of your well (See page 2 "Finding the Depth of Your

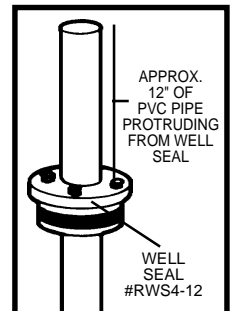
Well"). This is the total length of rigid PVC pipe and couplings to cement onto the 1-1/4" male PVC adapter. Cement one section of rigid PVC pipe to the PVC adaptor which is connected to the foot valve, then lower the whole assembly into the well, foot valve first. Firmly clamp the end of the rigid PVC pipe with a pipe clamp to prevent the assembly from sliding down into the well.



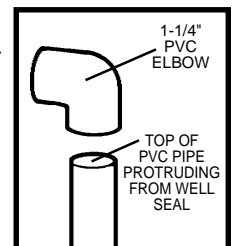
- STEP 3** Cement as many couplings and sections of rigid PVC pipe as it takes to equal the depth of your well minus five feet (1.5 meters), then firmly clamp the assembly with a pipe clamp to prevent the assembly from sliding down into the well.



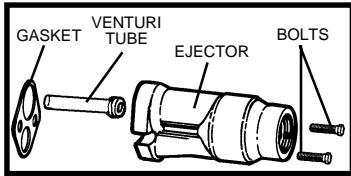
- STEP 4** Remove pipe clamp and slide Well Seal #RWS4-12 over rigid PVC pipe and onto well casing. Position assembly so that twelve inches of rigid PVC pipe protrude from well seal. Alternately turn bolts on well seal counterclockwise until rubber gaskets are tight against well casing and rigid PVC pipe.



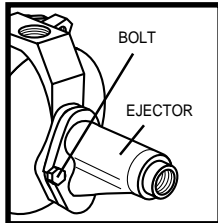
- STEP 5** Cement 1-1/4" PVC elbow onto rigid PVC pipe protruding from well seal. If desired, some length may be cut off of rigid PVC pipe before cementing elbow. Smooth the inside of any rigid PVC pipe that has been cut with a round file or knife.



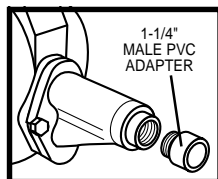
**STEP 6** Open ejector kit (for R50 pump use venturi tube part number 25881A437), (for R100 pump use venturi tube part number 25881A485). Thread venturi tube into ejector until snug. Place gasket over venturi tube so that openings in gasket line up with openings in ejector.



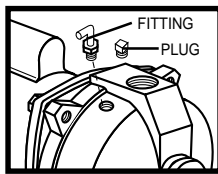
**STEP 7** Slide bolts through the bolt openings on either side of the ejector, through the gasket and bolt ejector to front of the pump. Tighten bolts securely.



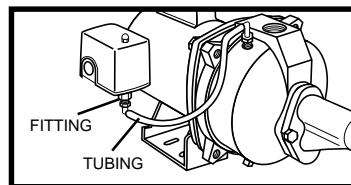
**STEP 8** Thread a 1-1/4" male PVC adapter into front of ejector. Hand tighten, then turn 1/4 turn with wrench.



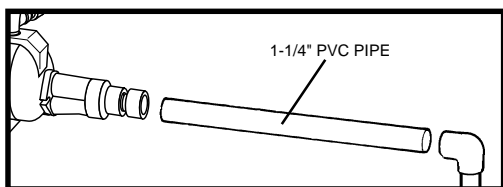
**STEP 9** Remove plug from left front top of the pump and replace with the fittings from the ejector kit.



**STEP 10** Thread the fitting into the bottom of the pressure switch located on the side of the pump. Slide one end of the ejector kit tubing over each fitting.

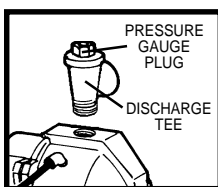


**STEP 11** Cement as many sections and couplings of PVC pipe needed to connect the PVC elbow to the 1-1/4" male PVC adapter in the front of the pump.

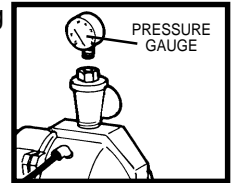


**PRIMING SHALLOW WELL JET PUMPS**

**STEP 12** Using pipe wrench, thread 1" discharge tee #RDT into top of pump. Remove pressure gauge plug from top of discharge tee. **TO PRIME:** Put a garden hose into top of discharge tee and fill pipes and pump until water overflows from top of discharge tee. This may take several minutes.

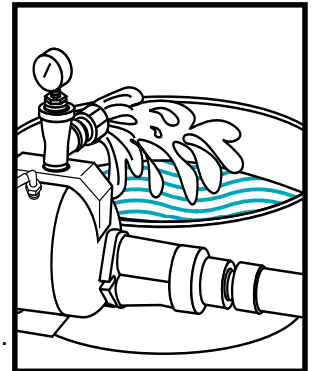


**STEP 13** Thread pressure gauge plug back into discharge tee and thread pressure gauge #RG2 into pressure gauge plug. Make sure all connections are tightly sealed.

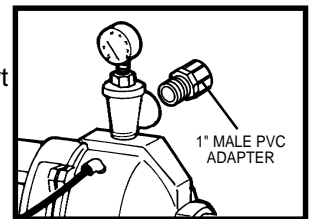


**STEP 14** Complete all electrical connections as specified on pages 1 and 2 in the pre-installation instructions.

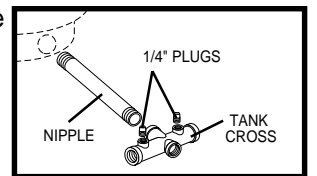
**STEP 15** Place a large bucket beneath discharge tee outlet. Start motor. If pump is off-set from well 4 feet or more, it may take a few minutes for pump to prime. **Failure to prime in 5 minutes:** Stop motor, remove pressure gauge plug from discharge tee, add more water, try again.



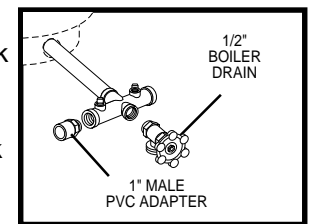
**STEP 16** Allow pump to run long enough to clear the well of sand or dirt and to insure well will not run dry. Stop motor. Screw 1" male PVC adapter into discharge tee outlet.



**STEP 17** Thread 10" x 1" nipple into pressure tank. Thread tank cross #RTC-290-1 into nipple so that the two 1/4" holes in tank cross face upward. Plug two outlets on tank cross with two 1/4" plugs.



**STEP 18** Thread 1/2" boiler drain into front of tank cross. Thread 1" male PVC adapter onto inlet side of tank cross.



**STEP 19** Cement as many sections and couplings of rigid 1" PVC pipe needed to connect the 1" male PVC adapter in the discharge tee to the 1" male adapter on the tank cross inlet. Set pressure in the diaphragm pressure tank to 2 pounds less than the cut-in pressure of the pump. The cut-in pressure of all Water Ace pumps is factory preset to 20 PSI (137.9 KPa). If this cut-in setting has not been changed, then the diaphragm pressure tank should be set to 18 PSI (124.1 KPa). Total installation should look like the shallow well drawing on the next page.

## WELL POINT PUMP INSTALLATION

### Materials needed in addition to Shallow Well General Materials, for Well Points only

- Enough galvanized 1-1/4" pipe and unions to reach from bottom of well to one foot (1/2 meter) above ground level
- One 1-1/4" galvanized elbow
- One 1-1/4" galvanized nipple
- One 1-1/4" check valve #RCV-12
- One 1-1/4" male PVC adapter

**STEP 1:** Drive the well point into the ground according to the instructions included with your well point. Use as much galvanized pipe and unions as it takes to both

reach the water and leave approximately one foot (1/2 meter) of pipe protruding from the ground.

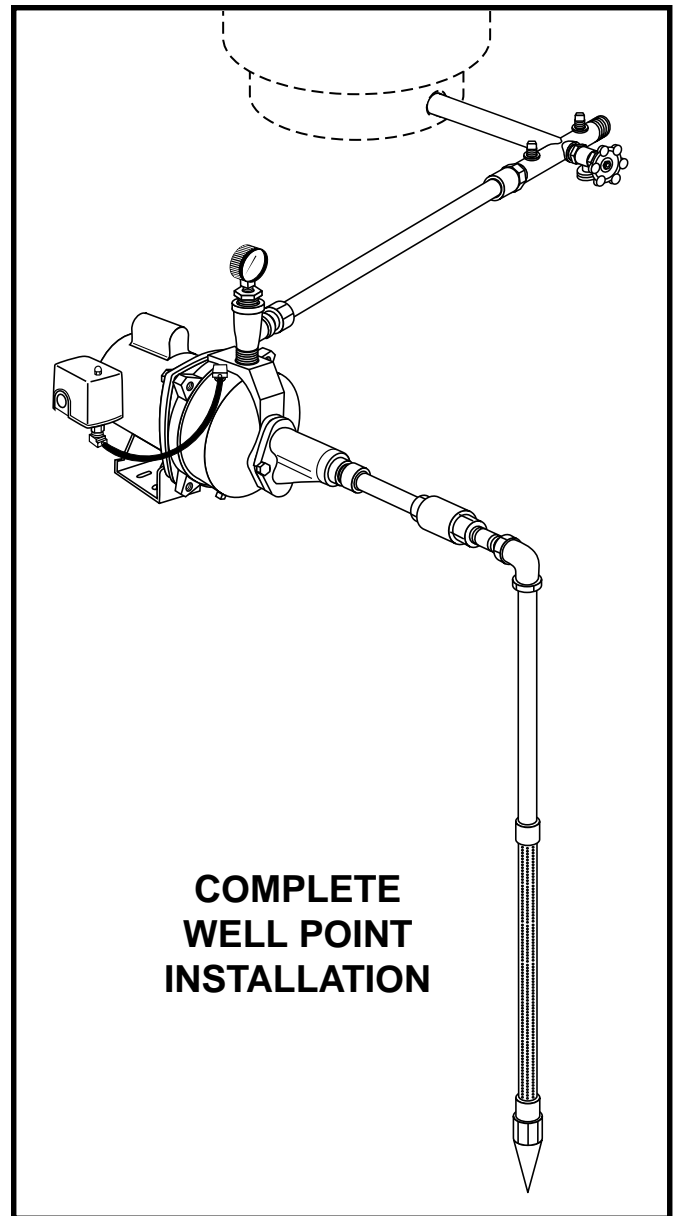
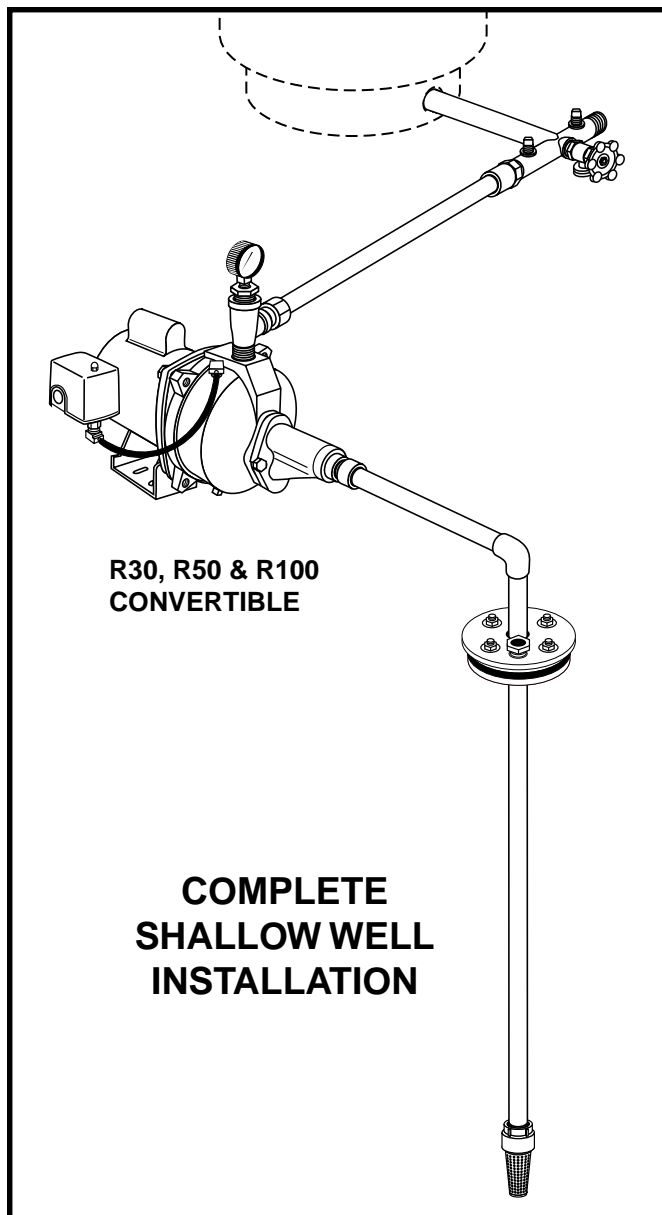
**STEP 2:** Thread 1-1/4" galvanized elbow onto the pipe protruding from the ground.

**STEP 3:** Thread 1-1/4" galvanized nipple into the 1-1/4" galvanized elbow.

**STEP 4:** Thread 1-1/4" check valve onto the 1-1/4" galvanized nipple.

**STEP 5:** Thread 1-1/4" male PVC adapter into the 1-1/4" check valve.

**STEP 6:** FOLLOW STEPS 6-20 IN SHALLOW 4" DIAMETER CASSED WELL INSTRUCTIONS. Total installation should look like the well point drawing below.



# DEEP WELL PUMP INSTALLATION (4" DIAMETER CASED WELL)

For wells over 25 feet (7.5 meters), but not exceeding 110 feet (30 meters) in depth, the 1 HP R100 Convertible Deep Well Pump is recommended. However, the 1/2 HP R50 Deep Well Pump may also be used for depths not exceeding 80 feet (24 meters). The 1/3 HP R30 Deep Well Pump may also be used for depths not exceeding 60 feet (18 meters). Materials with part numbers are quality Water Ace parts.

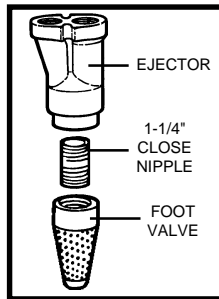
## General Materials

- One can PVC cement (read instructions carefully)
- One can thread compound (read instructions carefully)
- Two 1" female PVC adapters
- Enough rigid 1-1/4" PVC pipe and couplings to reach from bottom of well to pump (delivery pipe)
- One 1-1/4" PVC elbow
- One 1-1/4" male PVC adapter
- Two male 3/4" PVC adapters
- Enough rigid 3/4" PVC pipe to reach from pump to pressure tank to service line
- One tank tee #RTT1-LF (for diaphragm pressure tanks)
- Two 1/4" plugs
- One 1/2" boiler drain
- One 1-1/4" close nipple
- One 1" x 5" nipple
- One 1-1/4" female adapter
- One well seal #RWS4-1012
- Enough rigid 1" PVC pipe and couplings to reach from bottom of well to pump (pressure pipe)
- One 1" PVC elbow
- Two 1-1/4" male PVC adapters
- One 1" x 4" nipple

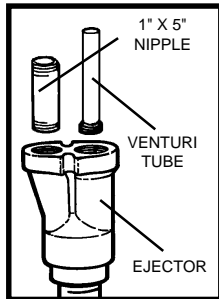
**REMINDER: ALL JOINTS AND CONNECTIONS MUST BE AIRTIGHT. A SINGLE PIN-HOLE LEAK WILL PREVENT THE PROPER OPERATION OF THE PUMP. USE THREAD COMPOUND ON ALL THREADED CONNECTIONS UNLESS SPECIFIED OTHERWISE.**

## TO INSTALL CONVERTIBLE

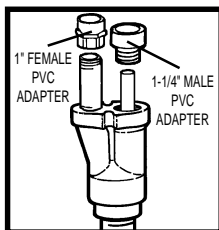
**STEP 1** Thread 1-1/4" close nipple into Foot Valve. Thread the other end of 1-1/4" close nipple into bottom of twin ejector. Hand tighten, then tighten 1/4 turn with pipe wrench.



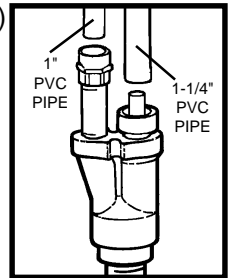
**STEP 2** The ejector has two holes in the top of it. Thread deep well venturi tube (part #25881A281 for R30, part #25881A328 for R50, part #25881A437 for R100 stamped on the side) into larger hole until snug. Thread 1" x 5" nipple into smaller hole. Only hand tighten venturi tube. Tighten nipple 1/4 turn with pipe wrench.



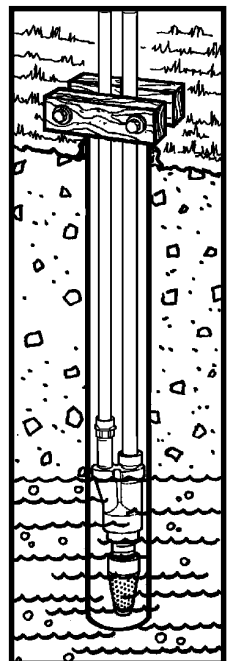
**STEP 3** Thread a 1-1/4" male PVC adapter over the venturi tube and into ejector. Thread a 1" female PVC adapter onto the 1" x 5" nipple. Tighten adapters 1/4 turn with crescent wrench.



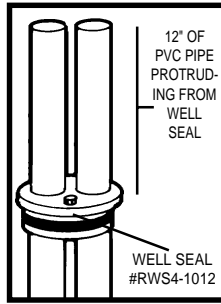
**STEP 4** Subtract five feet (1.5 meter) from the depth of your well. This is the total length of PVC pipe and couplings to cement onto both 1-1/4" male and 1" female PVC adapters. Cement a section of PVC pipe to each adapter, then lower the whole assembly into the well, foot valve first. Firmly clamp the end of the PVC pipes with a pipe clamp to prevent the assembly from sliding down into well.



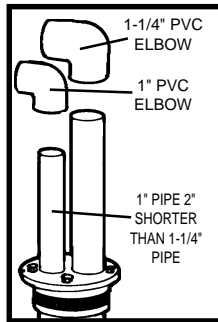
**STEP 5** Cement as many couplings and sections of rigid PVC pipe on both the pressure and delivery sides as it takes to equal the depth of your well minus five feet (1.5 meter), then firmly clamp the assembly with a pipe clamp to prevent the assembly from sliding down into the well. Be sure to keep track of which pipe is the pressure pipe and which is the delivery pipe.



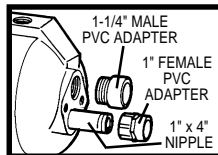
**STEP 6** Remove pipe clamp and slide well seal #RWS4-1012 over PVC pipes and onto well casing. DO NOT let assembly slide down into well. Position assembly so that twelve inches of PVC pipes protrude from well seal. Using crescent wrench, turn bolts on well seal counterclockwise until rubber gaskets are tight against the well casing and the PVC pipes.



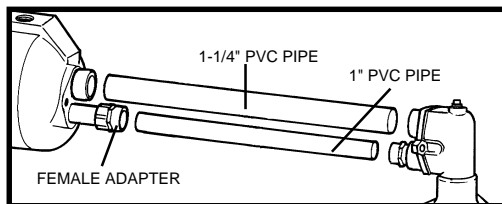
**STEP 7** Cut 1" pipe 2" shorter than the 1-1/4" pipe. Smooth rough edges. Cement 1" and 1-1/4" PVC elbows to pipes protruding from the well seal.



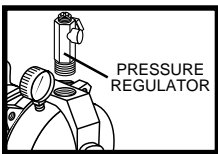
**STEP 8** Thread a 1-1/4" male PVC adapter into top hole in front of pump. Thread 1" x 4" nipple into bottom hole in front of pump. Thread the 1" female PVC adapter onto the 1" x 4" nipple.



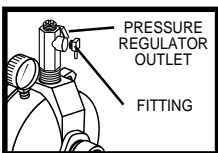
**STEP 9** Cement as many sections and couplings of rigid 1" and 1-1/4" PVC needed to connect the 1" female PVC adapter and the 1-1/4" male PVC adapter to the 1" and 1-1/4" PVC elbows.



**STEP 10** Open pressure regulator kit. With pipe wrench, thread the pressure regulator into 1" discharge at top of pump. Thread pressure gauge into side of pump case.

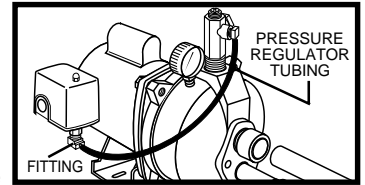


**STEP 11** Thread fitting into opening to right of pressure regulator outlet.



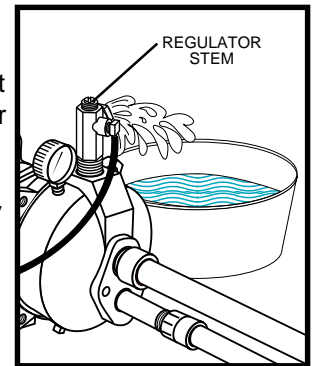
## PRIMING DEEP WELL JET PUMPS

**STEP 12** Thread fitting from kit into bottom of pressure switch located on side of pump. Slide one end of pressure regulator tubing over fitting, and the other end over other fitting. **TO PRIME:** Put a garden hose into the top of the pressure regulator and fill pipes and pump with water until water overflows from top of pressure regulator. This may take several minutes.

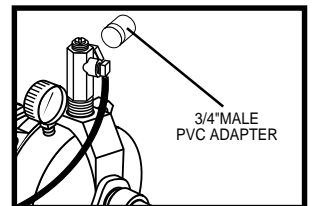


**STEP 13** Complete all electrical connections as specified on pages 2 and 3 in the pre-installation instructions.

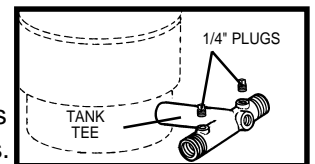
**STEP 14** Place a large bucket beneath the pressure regulator outlet. Start motor. Turn regulator adjustment screw down tight. If pump is properly primed a high pressure will immediately show on the pressure gauge. With pump operating at high pressure, slowly unscrew regulator stem until maximum water flow is obtained without pressure dropping to zero. If pressure falls completely, retighten stem and readjust. **Steady pressure must not be less than 24 lbs. (17 liters) for the R50 and 32 lbs. (22 liters) for the R100. If no pressure shows:** Stop motor, remove pressure regulator from pump, add more water, and try again.



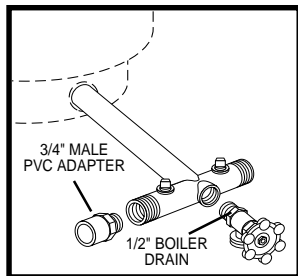
**STEP 15** Allow pump to run long enough to clear well of sand or dirt and to insure well will not run dry. Stop motor. Thread 3/4" male PVC adapter into pressure regulator outlet.



**STEP 16** Thread tank tee #RTT1-LF into diaphragm pressure tank. Plug two outlets on tank tee with two 1/4" plugs.

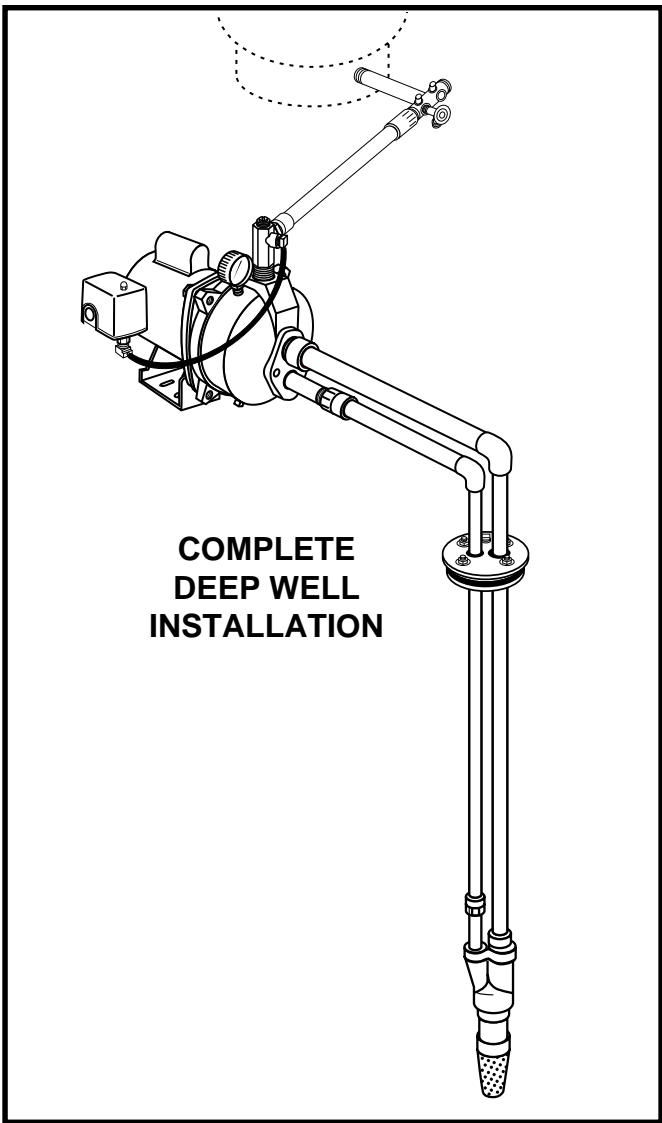


**STEP 17** Thread 1/2" boiler drain into front of tank tee. Thread 3/4" male PVC adapter onto inlet side of tank tee.



**STEP 18** Cement as many sections and couplings of rigid 3/4" PVC pipe needed to connect the 3/4" male PVC adapter in the discharge tee to the 3/4" male adapter on the tank tee inlet. Set pressure in the diaphragm pressure tank to 2 pounds less than the cut-in pressure of the pump. The cut-in pressure of all Water Ace pumps is factory preset to 20 PSI (137.9 KPa) met. If this cut-in setting has not been changed, then the diaphragm pressure tank should be set to 18 PSI. Total installation should look like the deep well drawing at right.

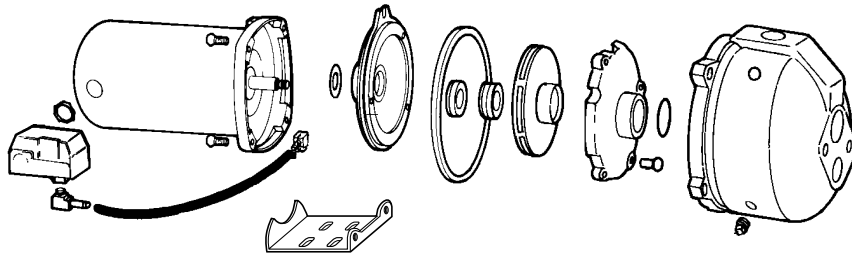
**CAUTION:** If you change pressure switch settings, set the cut-off pressure low enough to shut off the pump. If a valve shuts off and the cut-off setting is too high, the pump will run continuously without water flow causing overheating and serious damage.



# TROUBLESHOOTING CHECKLIST (CAUTION: SHUT OFF POWER TO PUMP)

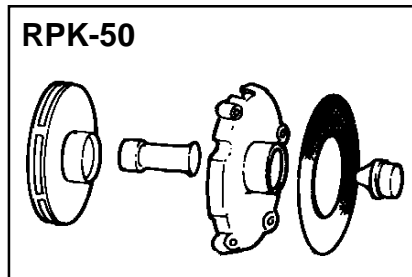
| PROBLEM   | POSSIBLE CAUSES   |
|---|---|
| <b>Pump will not prime</b>  | <ul style="list-style-type: none"> <li>• Not enough water. Stop motor, remove pressure gauge plug, and fill case with water.</li> <li>• Pump wired incorrectly.</li> <li>• Plugged venturi tube or nozzle.</li> <li>• Foot valve is sitting in sand or mud, or is stuck shut, or leaks.</li> <li>• Low well water level. In deep wells, the ejector as well as the foot valve must be below water level.</li> <li>• For the R30, R50 &amp; R100, the diffuser O-ring seal may be improperly positioned.</li> <li>• Leaks. Check all connections for airtightness.</li> </ul>  |
| <b>Pump delivers water for a period of time, then stops pumping</b> | <ul style="list-style-type: none"> <li>• Low well water level. Use a water-level tester while pump is operating.</li> <li>• Plugged venturi tube, nozzle, or impeller parts.</li> <li>• In deep wells, the regulator may be set incorrectly. See Step 15 in the 4" diameter Deep Well Installation Instructions.</li> </ul>   |
| <b>Pump does not deliver rated capacity</b>                         | <ul style="list-style-type: none"> <li>• Plugged venturi or nozzle.</li> <li>• Faulty pressure gauge resulting in false readings.</li> <li>• In deep wells, the operating pressure may be too high. See Step 15 in the 4" diameter Deep Well Installation Instructions.</li> <li>• Low well water level. Use a water-level tester while pump is operating.</li> <li>• For the R30, R50 &amp; R100, the diffuser O-ring seal may be improperly positioned.</li> <li>• Over-submergence of ejector. In deep wells, if ejector is more than 10 feet below pumping level, pumping capacity is reduced.</li> <li>• In deep wells, the ejector may have improper size and depth setting.</li> </ul> |
| <b>Motor overheats and shuts off (overload)</b>                     | <ul style="list-style-type: none"> <li>• Motor voltage does not match power supply voltage. See pages 2 and 3.</li> <li>• Improper wire size. See Wire Size Guide on page 3.</li> <li>• Impeller is rubbing against pump case.</li> </ul>   |
| <b>Pump delivers water but will not shut off</b>                    | <ul style="list-style-type: none"> <li>• Impeller neck is worn.</li> <li>• Defective pressure switch.</li> <li>• For the R30, R50 &amp; R100, the O-ring seal may be improperly positioned.</li> <li>• The tube connecting the two fittings may be clogged.</li> <li>• Tank precharge pressure too high. Tank precharge pressure must be 1-2 pounds less than switch turn-on setting.</li> <li>• In deep wells, the water level may be going below limit of ejector. Use water-level tester while pump is operating.</li> </ul>   |
| <b>Pressure switch turns on and off every few seconds</b>           | <ul style="list-style-type: none"> <li>• Galvanized storage tank is waterlogged.</li> <li>• Leaky foot valve.</li> <li>• Too much tank pressure.</li> </ul>   |
| <b>Motor fails or does not operate properly</b>                     | <ul style="list-style-type: none"> <li>• If within Warranty, return pump/motor unit to place of purchase (with proof of purchase) for exchange.</li> </ul>  |

# PUMP DISASSEMBLY

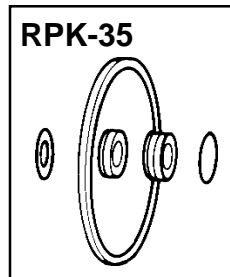


R30, R50 or R100

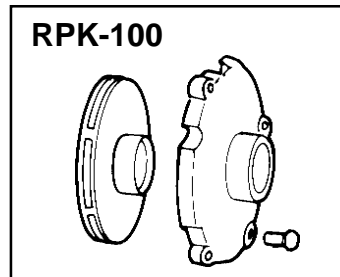
## REPAIR KITS



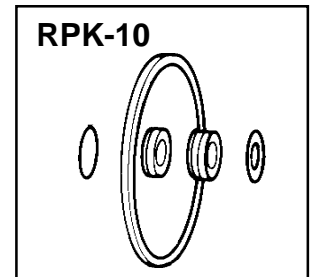
RPK-50



RPK-35



RPK-100



RPK-10

**REPAIR KITS FOR R30 & R50 PUMPS**

**REPAIR KITS FOR THE R100 PUMP**

## LIMITED WARRANTY

WATER ACE PUMP CO. will repair or replace for the original user any portion of a new Water Ace product which proves defective due to materials or workmanship of WATER ACE PUMP CO. Contact the nearest authorized WATER ACE PUMP CO. dealer for warranty service. WATER ACE PUMP CO. shall possess the sole right to determine whether to repair or replace defective equipment, parts or components. THIS WARRANTY DOES NOT COVER DAMAGE DUE TO LIGHTNING OR OTHER CONDITIONS BEYOND THE CONTROL OF WATER ACE PUMP CO.

**PUMPS:** Warranted 12 months from date of purchase or 18 months from date of manufacture, whichever occurs first. Receipt and product date code required for warranty claim.

**LABOR & COSTS:** WATER ACE PUMP CO. shall IN NO EVENT be liable for the cost of field labor or other charges incurred by any customer in removing and/or reaffixing any WATER ACE PUMP product, part or component.

**THIS WARRANTY WILL NOT APPLY:** (a) to defects or malfunctions resulting from failure to properly install, operate, or maintain the unit in accordance with printed instructions provided; (b) to failures resulting from abuse, accident, or negligence; (c) to normal maintenance services and the parts used in connection with such service; (d) to units which are not installed in accordance with applicable local codes, ordinances, and good trade practices; (e) if the unit is moved from its original installation location; (f) if unit is used for purposes other than for what it was designed and manufactured.

**PRODUCT IMPROVEMENTS:** WATER ACE PUMP CO. reserves the right to change or improve its products or any component without obligation to provide such a change or improvement for units previously sold and/or shipped.

**WARRANTY EXCLUSIONS:** After the expiration of this warranty period, THERE WILL BE NO WARRANTIES INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE ON ANY SPECIFIC WATER ACE PUMP PRODUCT. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. No warranties or representations at any time made by any representative of WATER ACE PUMP CO. shall vary or expand the provisions hereof.

**LIABILITY LIMITATION:** IN NO EVENT SHALL WATER ACE PUMP CO. BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES RESULTING FROM OR RELATED IN ANY MANNER TO ANY WATER ACE PUMP PRODUCT OR PARTS. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This Warranty gives you specific legal rights. You may have other rights which vary from state to state. In the absence of suitable proof of purchase date, the effective date of this warranty will be based upon the date of manufacture plus 180 days.

**Direct all Notices, etc. to: Product Warranty & Return Dept., WATER ACE PUMP CO., B.P. 9138, 269 Trillium Dr., Kitchener, Ontario N2G 4W5.**



Pump Co.®

Water Ace Pump Co. • B.P. 9138, 269 Trillium Drive., Kitchener, Ontario N2G 4W5

TEL: (519) 748-5470 FAX: (519) 748-2553